

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>		
		Application Number	10/725,904	
		Filing Date	2003-12-01	
		First Named Inventor	J. RODNEY WALTON	
		Art Unit	2472	
		Examiner Name	JAIN, RAJ K	
Sheet	1	of	11	Attorney Docket No: 030412

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2(f) known}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	001	US5241544	08-31-1993	JASPER; Steven C. et al.	
	002	US5295159	03-15-1994	KERPEZ; Kenneth J.	
	003	US5471647	11-28-1995	GERLACH; Derek. et al.	
	004	US5606729	02-25-1997	D'AMICO; Thomas V. et al.	
	005	US5867478	02-02-1999	BAUM; Kevin Lynn. et al.	
	006	US5886988	03-23-1999	YUN; Louis C. et al.	
	007	US6084915	07-04-2000	WILLIAMS; Richard G. C.	
	008	US6131016	10-10-2000	GREENSTEIN; Lawrence Joel. et al.	
	009	US6141567	10-31-2000	YOUSSEFMIR; Michael. et al.	
	010	US6167031	12-26-2000	OLOFSSON; H.ang.kan Gunnar. et al.	
	011	US6178196	01-23-2001	NAGUIB; Ayman F. et al.	
	012	US6232918	05-15-2001	WAX; Mati. et al.	
	013	US6266528	07-24-2001	FARZANEH; Farhad.	
	014	US6278726	08-21-2001	MESECHER; David K. et al.	
	015	US6298035	10-02-2001	HEISKALA; Juha.	
	016	US6308080	10-23-2001	BURT; Donald G. et al.	
	017	US6314289	11-06-2001	EBERLEIN; Ernst. et al.	
	018	US6339399	01-15-2002	ANDERSSON; Soren. et al.	
	019	US6346910	02-12-2002	ITO; Tei.	

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. †† Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ‡‡ Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>		
		Application Number	10/725,904	
		Filing Date	2003-12-01	
		First Named Inventor	J. RODNEY WALTON	
		Art Unit	2472	
		Examiner Name	JAIN, RAJ K	
Sheet	2	of	11	Attorney Docket No: 030412

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	020	US6348036	02-19-2002	LOONEY; Christopher S. et al.	
	021	US6377812	04-23-2002	RASHID-FARROKHI; Farrokh. et al.	
	022	US6385264	05-07-2002	TERASAWA; Daisuke. et al.	
	023	US6452981	09-17-2002	RALEIGH; Gregory G. et al.	
	024	US6473467	10-29-2002	WALLACE; Mark. et al.	
	025	US6532562	03-11-2003	CHOU; Philip A. et al.	
	026	US6574211	06-03-2003	PADOVANI; Roberto. et al.	
	027	US6574271	06-03-2003	MESECHER; David K. et al.	
	028	US6594798	07-15-2003	CHOU; Philip A. et al.	
	029	US6608874	08-19-2003	BEIDAS; Bassel F. et al.	
	030	US6611231	08-26-2003	CRILLY; Jr. William J. et al.	
	031	US6615024	09-02-2003	BOROS; Tibor. et al.	
	032	US6654590	11-25-2003	BOROS; Tibor. et al.	
	033	US6668161	12-23-2003	BOROS; Tibor. et al.	
	034	US6683916	01-27-2004	SARTORI; Philippe Jean-Marc. et al.	
	035	US6690660	02-10-2004	KIM; Younglok. et al.	
	036	US6738020	05-18-2004	LINDSKOG; Erik D. et al.	
	037	US6751187	06-15-2004	WALTON; Jay R. et al.	
	038	US6751444	06-15-2004	MEIYAPPAN; Palaniappan.	

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ** Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. †† Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	10/725,904
		Filing Date	2003-12-01
		First Named Inventor	J. RODNEY WALTON
		Art Unit	2472
		Examiner Name	JAIN, RAJ K
Sheet	3	of	11
Attorney Docket No: 030412			

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2(f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	039	US6751480	06-15-2004	KOGIANTIS; Achilles George. et al.	
	040	US6760388	07-06-2004	KETCHUM; John W. et al.	
	041	US6771706	08-03-2004	LING; Fuyun. et al.	
	042	US6785341	08-31-2004	WALTON; Jay R. et al.	
	043	US6788948	09-07-2004	LINDSKOG; Erik D. et al.	
	044	US6795424	09-21-2004	KAPOOR; Samir. et al.	
	045	US6802035	10-05-2004	CATREUX; Severine. et al.	
	046	US6850498	02-01-2005	HEATH; Robert W. et al.	
	047	US6859503	02-22-2005	PAUTLER; Joseph J. et al.	
	048	US6873651	03-29-2005	TESFAI; Yohannes. et al.	
	049	US6879578	04-12-2005	PAN; Jung-Lin. et al.	
	050	US6885708	04-26-2005	THOMAS; Timothy A. et al.	
	051	US6888809	05-03-2005	FOSCHINI; Gerard Joseph. et al.	
	052	US6937592	08-30-2005	HEATH; Jr. Robert W. et al.	
	053	US6963742	11-08-2005	BOROS; Tibor. et al.	
	054	US6965762	11-15-2005	SUGAR; Gary L. et al.	
	055	US6985434	01-10-2006	WU; Shiquan. et al.	
	056	US7031671	04-18-2006	MOTTIER; David.	
	057	US7062294	06-13-2006	ROGARD; Roger. et al.	
	058	US7072381	07-04-2006	ATARASHI; Hiroyuki. et al.	

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡
 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶
 For JAPANESE patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. § Kind of document by the appropriate symbols as indicated on the document under WFO Standard ST. 16 if possible. * Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND
 TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>		
		Application Number	10/725,904	
		Filing Date	2003-12-01	
		First Named Inventor	J. RODNEY WALTON	
		Art Unit	2472	
		Examiner Name	JAIN, RAJ K	
Sheet	4	of	11	Attorney Docket No: 030412

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	059	US7072410	07-04-2006	MONSEN; Peter.	
	060	US7072413	07-04-2006	WALTON; Jay R. et al.	
	061	US7088671	08-08-2006	MONSEN; Peter.	
	062	US7099377	08-29-2006	BERENS; Friedbert. et al.	
	063	US7110378	09-19-2006	ONGGOSANUSI; Eko Nugroho. et al.	
	064	US7110463	09-19-2006	WALLACE; Mark S. et al.	
	065	US7113499	09-26-2006	NAFIE; Mohammed. et al.	
	066	US7149254	12-12-2006	SAMPATH; Hemanth.	
	067	US7155171	12-26-2006	EBERT; Paul Michael. et al.	
	068	US7187646	03-06-2007	SCHRAMM; Peter.	
	069	US7197084	03-27-2007	KETCHUM; John W. et al.	
	070	US7200404	04-03-2007	PANASIK; Carl M. et al.	
	071	US7206354	04-17-2007	WALLACE; Mark S. et al.	
	072	US7218684	05-15-2007	BOLOURCHI; Nader. et al.	
	073	US7224704	05-29-2007	LU; Xiaolin. et al.	
	074	US7231184	06-12-2007	EILTS; Henry S. et al.	
	075	US7233625	06-19-2007	MA; Jianglei. et al.	
	076	US7238508	07-03-2007	LIN; Min. et al.	
	077	US7248638	07-24-2007	BANISTER; Brian C.	
	078	US7254171	08-07-2007	HUDSON; John E.	
	079	US7263119	08-28-2007	HSU; Yungping. et al.	

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡
 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶
 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. † Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. † Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND
 TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
 If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>		
		Application Number	10/725,904	
		Filing Date	2003-12-01	
		First Named Inventor	J. RODNEY WALTON	
		Art Unit	2472	
		Examiner Name	JAIN, RAJ K	
Sheet	5	of	11	Attorney Docket No: 030412

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2(f) known}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	080	US7280625	10-09-2007	KETCHUM; John W. et al.	
	081	US7289570	10-30-2007	SCHMIDL; Timothy. et al.	
	082	US7298778	11-20-2007	VISOZ; Raphael. et al.	
	083	US7317750	01-08-2008	SHATTIL; Steve J.	
	084	US7342912	03-11-2008	KERR; Adam B. et al.	
	085	US7386076	06-10-2008	ONGGOSANUSI; Eko N. et al.	
	086	US7403748	07-22-2008	KESKITALO; Ilkka. et al.	
	087	US7421039	09-02-2008	MALAENDER; Laurence Eugene. et al.	
	088	US7480278	01-20-2009	PEDERSEN; Klaus Ingemann. et al.	
	089	US7606296	10-20-2009	HSU; Yungping. et al.	
	090	US20020018453	02-14-2002	YU, Yao; et al.	
	091	US20020044591	04-18-2002	LEE, Hyun-Woo; et al.	
	092	US20020098872	07-25-2002	JUDSON, Bruce A.	
	093	US20020181390	12-05-2002	MODY, Apurva N. et al.	
	094	US20030002450	01-02-2003	JALALI, Ahmad; et al.	
	095	US20030048856	03-13-2003	KETCHUM, John W. et al.	
	096	US20030119452	06-26-2003	KIM, Sung-Hoon; et al.	
	097	US20030139194	07-24-2003	ONGGOSANUSI, Eko N. et al.	
	098	US20030153360	08-14-2003	BURKE, Joseph P. et al.	

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. **Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. †† Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>	
		Application Number	10/725,904
		Filing Date	2003-12-01
		First Named Inventor	J. RODNEY WALTON
		Art Unit	2472
		Examiner Name	JAIN, RAJ K
Sheet	6	of	11
			Attorney Docket No: 030412

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2(f) known}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	099	US20030157954	08-21-2003	MEDVEDEV, Irina; et al.	
	100	US20030235255	12-25-2003	KETCHUM, John W. et al.	
	101	US20040087324	05-06-2004	KETCHUM, John W. et al.	
	102	US20070177681	08-02-2007	CHOI; In-Kyeong et al.	
	103	US20020018310	02-14-2002	HUNG; Tsan-Yao.	
	104	US20020041632	04-11-2002	SATO; Kazushi. et al.	
	105	US20020057659	05-16-2002	OZLUTURK; Fatih M. et al.	
	106	US20020085620	07-04-2002	MESECHER; David K.	
	107	US20020085641	07-04-2002	BAUM; Kevin L.	
	108	US20020105928	08-08-2002	KAPOOR; Samir. et al.	
	109	US20020183010	12-05-2002	CATREUX; Severine E. et al.	
	110	US20020196842	12-26-2002	ONGGOSANUSI; Eko N. et al.	
	111	US20030078024	04-24-2003	MAGEE; David Patrick. et al.	
	112	US20030095197	05-22-2003	WHEELER; Richard B. et al.	
	113	US20030099306	05-29-2003	NILSSON; Johan. et al.	
	114	US20030162519	08-28-2003	SMITH; Martin. et al.	
	115	US20030206558	11-06-2003	PARKKINEN; Teemu. et al.	
	116	US20030235149	12-25-2003	CHAN; Albert. et al.	
	117	US20040082356	04-29-2004	WALTON; J. Rodney. et al.	

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. **Kind of document by the appropriate symbols as indicated on the document under WIFO Standard ST. 16 if possible. †† Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>		
		Application Number	10/725,904	
		Filing Date	2003-12-01	
		First Named Inventor	J. RODNEY WALTON	
		Art Unit	2472	
		Examiner Name	JAIN, RAJ K	
Sheet	7	of	11	Attorney Docket No: 030412

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	118	US20040085939	05-06-2004	WALLACE; Mark S. et al.	
	119	US20040179627	09-16-2004	KETCHUM; John W. et al.	
	120	US20040198276	10-07-2004	TELLADO; Jose. et al.	
	121	US20050047384	03-03-2005	WAX; Mati. et al.	
	122	US20050111599	05-26-2005	WALTON; J. Rodney. et al.	
	123	US20050128953	06-16-2005	WALLACE; Mark S. et al.	
	124	US20060104196	05-18-2006	WU; Shiquan; et al.	
	125	US20020115473	08-22-2002	HWANG, Jong Yoon; et al.	
	126	US20020147953	10-10-2002	CATREUX, Severine ; et al.	
	127	US20020122381	09-05-2002	WU, Shiquan; et al.	
	128	US20020080735	06-27-2002	HEATH, Robert W. et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)			
	129	EP1185048	06-03-2002	NORTEL NETWORKS LTD [CA]	<input type="checkbox"/>
	130	CN1308794	08-15-2001	ARRAYCOMM INC [US]	<input checked="" type="checkbox"/>
	131	JP2002176379	06/21/2002	JAPAN TELECOM CO LTD	<input checked="" type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			<i>Complete if Known</i>		
			Application Number	10/725,904	
			Filing Date	2003-12-01	
			First Named Inventor	J. RODNEY WALTON	
			Art Unit	2472	
			Examiner Name	JAIN, RAJ K	
Sheet	8	of	11	Attorney Docket No: 030412	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number* Kind Code ⁵ (if known)				
	132	WO199809381	03-05-1998	UNIV LELAND STANFORD JUNIOR [US]		<input type="checkbox"/>
	133	WO199830047	07-09-1998	ARRAYCOMM INC [US]		<input type="checkbox"/>
	134	WO2002003557	01-10-2002	IOSPAN WIRELESS INC [US]		<input type="checkbox"/>
	135	WO2002069523	09-06-2002	MAGNOLIA BROADBAND INC [US]		<input type="checkbox"/>
	136	DE19951525A1	06-07-2001	SIEMENS AG [DE].		<input checked="" type="checkbox"/>
	137	EP0805568A1	11-05-1997	TRW INC [US].		<input type="checkbox"/>
	138	EP0951091A2	10-20-1999	LUCENT TECHNOLOGIES INC [US].		<input type="checkbox"/>
	139	EP1087545A1	03-28-2001	UNIV SINGAPORE [SG].		<input type="checkbox"/>
	140	EP1117197A2	07-18-2001	LUCENT TECHNOLOGIES INC [US].		<input type="checkbox"/>
	141	EP1175022A2	01-23-2002	SAMSUNG ELECTRONICS CO LTD [KR].		<input type="checkbox"/>
	142	EP1182799A2	02-27-2002	LUCENT TECHNOLOGIES INC [US].		<input type="checkbox"/>
	143	JP2001237751A	08-31-2001	LUCENT TECHNOLOGIES INC.		<input checked="" type="checkbox"/>
	144	RU2015281C1	06-30-1994	KONDRASHOV BORIS M [RU].		<input checked="" type="checkbox"/>
	145	RU2152132C1	06-27-2000	J NII SVJAZI. et al.		<input checked="" type="checkbox"/>
	146	WO0011823A1	03-02-2000	RADIX TECHNOLOGIES INC [US]. et al.		<input type="checkbox"/>
	147	WO0036764A2	06-22-2000	NOKIA NETWORKS OY [FI]. et al.		<input type="checkbox"/>
	148	WO0197400A2	12-20-2001	QUALCOMM INC [US].		<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (optional). 2
 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4
 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. *Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			<i>Complete if Known</i>		
			Application Number	10/725,904	
			Filing Date	2003-12-01	
			First Named Inventor	J. RODNEY WALTON	
			Art Unit	2472	
			Examiner Name	JAIN, RAJ K	
Sheet	9	of	11	Attorney Docket No: 030412	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number* Kind Code ⁵ (if known)				
	149	WO0201732A2	01-03-2002	NOKIA CORP [FI]. et al.		<input type="checkbox"/>
	150	WO02060138A2	08-01-2002	QUALCOMM INC [US].		<input type="checkbox"/>
	151	WO0215433A1	02-21-2002	FUJITSU LTD [JP]. et al.		<input type="checkbox"/>
	152	WO03034646A2	04-24-2003	NORTEL NETWORKS LTD [CA].		<input type="checkbox"/>
	153	WO200171928	09-27-2001	QUALCOMM INC [US]		<input type="checkbox"/>
	154	WO9622662A1	07-25-1996	ARRAYCOMM INC [US].		<input type="checkbox"/>
	155	WO99016214	04-01-1999	COMMW SCIENT IND RES ORG [AU] ET AL.		<input type="checkbox"/>
	156	WO9957820	11-11-1999	ARRAYCOMM INC [US]		<input type="checkbox"/>
	157	WO04039022	05-06-2004	QUALCOMM INC [US]		<input type="checkbox"/>
						<input type="checkbox"/>

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T2
	158	3GPP2 T1A/E1A/IS-2000-2-A, "Physical Layer Standard for cdma2000 Spread Spectrum Systems", (November 19, 1999).				
	159	B. HASSIBI, et al. "High-Rate Codes that are Linear in Space and Time," LUCENT Technologies, Murray Hill, NY (USA), Aug. 22, 2000, (pp. 1-54).				
	160	GAO, et al. "On implementation of Bit-Loading Algorithms for OFDM Systems with Multiple-Input Multiple Output," VTC 2002-Fall, 2002 IEEE 56th. Vehicular Technology Conference Proceedings. Vancouver, Canada, Sept. 24-28, 2002, IEEE Vehicular Technology Con.				

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (optional).²
 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).⁴
 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>		
		Application Number	10/725,904	
		Filing Date	2003-12-01	
		First Named Inventor	J. RODNEY WALTON	
		Art Unit	2472	
		Examiner Name	JAIN, RAJ K	
Sheet	10	of	11	Attorney Docket No: 030412

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T2
	161	HAYASHI, K, A New Spatio-Temporal Equalization Method Based On Estimated Channel Response, Sept. 2001, IEEE Transaction on Vehicular Technology, vol. 50, Issue 5, pp. 1250-1259.		
	162	BINGHAM, "Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come," IEEE Communications Magazines, May 1990 (pgs. 5-13).		
	163	JONGREN et al., "Utilizing Quantized Feedback Information in Orthogonal Space-Time Block Coding," 2000 IEEE Global Telecommunications Conference, 2(4): 995-999, November 27, 2000.		
	164	KIESSLING, et al., "Short-Term and Long Term Diagonalization of Correlated MIMO Channels with Adaptive Modulation," IEEE Conference, vol. 2, (2002-09-15), pgs. 593-597.		
	165	L. DENEIRE, et al. "A LOW COMPLEXITY ML CHANNEL ESTIMATOR FOR OFDM," PROC IEEE ICC JUNE 2001 pgs. 1461-1465.		
	166	MIYASHITA, et al., "High Data-Rate Transmission with Eigenbeam-Space Division Multiplexing (E-SDM) in a MIMO Channel," VTC 2002-Fall. 2002 IEEE 56th. Vehicular Technology Conference Proceedings. Vancouver, Canada, Sept. 24-28, 2002, IEEE Vehicular Technology.		
	167	P.W. WOLNIANSKY, et al. "V-BLAST: An Architecture for Realizing Very High Data Rates Over the Rich-Scattering Wireless Channel," LUCENT Technologies, Holmdel, N.J.		
	168	S. M. ALAMOUTI "A Simple Transmit Diversity Technique for Wireless Communications" IEEE Journal on Select Areas in Communications, October 1998, vol. 16, no. 8, pp. 1451-1458.		
	169	DAE-KO Hong, Young-Jo Lee, Daesik Hong, and Chang-Eon Kang. "Robust frequency offset estimation for pilot symbol assisted packet CDMA with MIMO antenna systems." Communications Letters. IEEE. June 2002.		
	170	S.W. WALES, A MIMO technique within the UTRA TDD standard 06/22/05.		

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * Applicant's unique citation designation number (optional). 2
 See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). * For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22315-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22315-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.